

Notice of Allowability

Application No.

10/817,376

Examiner

Richard M. Lorence

Applicant(s)

PENNYCUFF, DALE L.

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 8 December 2004.
2. ☒ The allowed claim(s) is/are 1-33.
3. ☒ The drawings filed on 02 April 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

The amendment filed on December 8, 2004 has been entered. Claims 1, 2, 23 and 24 have been amended and new claims 26-33 have been added.

Claims 1-33 are allowed.

The following is an examiner's statement of reasons for allowance:

None of the prior art of record shows or suggests a power transmission device including the input member, output member, transfer clutch, clutch operator and clutch actuator arranged together in the manner set forth in claim 1, and particularly wherein the clutch operator includes a drive member with a tapered drive surface, a reaction member with a tapered reaction surface engaging the tapered drive surface and an apply surface engageable with the clutch, and the clutch actuator controls translational movement of the drive member and includes an electric motor and a drive mechanism interconnecting the drive member to the motor.

Nor does the prior art of record show or suggest a power transmission device including the rotary input member, rotary output member, torque transfer mechanism including a transfer clutch and a clutch actuator, and control system arranged together in the manner set forth in claim 15, and particularly wherein the clutch actuator includes a drive member with a tapered drive surface, a reaction member with a tapered reaction surface engaging the tapered drive surface and an apply surface engageable with the clutch, an electric motor and a conversion mechanism which converts rotary motion of the motor output into translational movement of the drive member.

Nor does the prior art of record show or suggest a power transfer assembly including the first shaft, second shaft, transfer clutch, clutch operator, and electric motor arranged together in the manner set forth in claim 23, and particularly wherein the clutch actuator includes a drive member with a tapered drive surface, a reaction member with a tapered reaction surface engaging the tapered drive surface and an apply surface engaging the clutch, and the electric motor causes linear, non-rotary translation of the drive member.

Nor does the prior art of record show or suggest a power transmission device including the input member, output member, transfer clutch and a clutch actuator, and control system arranged together in the manner set forth in claim 26, and particularly wherein the clutch actuator includes a drive member with a tapered drive surface, a reaction member with a tapered reaction surface, rollers disposed between the tapered drive surface and the tapered reaction surface, and an electric motor for causing translational movement of the drive member.


Nor does the prior art of record show or suggest a motor vehicle including the powertrain, first driveline, second driveline, power transmission device having a transfer clutch and a clutch actuator, and control system arranged together in the manner set forth in claim 32, and particularly wherein clutch actuator includes a drive member with a ramped drive surface, a reaction member with a ramped reaction surface, and an electric motor for causing translational movement of the drive member relative to the reaction member.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Lorence whose telephone number is (703) 308-3062. The examiner can normally be reached on Mondays through Fridays from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Richard M. Lorence
Primary Examiner
Art Unit 3681

Lorence/rml